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maximized.

COSAM INC.

JAPAN STEEL WORKS

LTD.

ABSTRACT OF THE DISCLOSURE

There is provided a semiconductor manufacturing apparatus comprising: a cassette station 16 in which wafers 18 are loaded; a stand-by conveying robot 10 for taking the wafers 18 out of the cassette station 16; a load lock chamber 12 in which the wafers 18 taken by the stand-by conveying robot 10 are accommodated; and a reaction chamber 14 placed in contact with the load lock chamber 12, the reaction chamber 14 having a shuttle blade 20 for drawing the wafers accommodated in the load lock chamber out of the load lock chamber 12 in a vacuum state and loading etched wafers in the load lock chamber, a rotary robot 26 for rotatively transferring the wafers taken out of the load lock chamber to be placed on the shuttle blade 20, and a heater stage 24 for etching the wafers transferred by the rotary robot 26 using a plasma generator 28, in which a pre-heating part 22 is placed above the shuttle blade 20, for pre-heating the wafers transferred into the reaction chamber 14 from the load lock chamber 12 before they are moved to the heater stage 24 in order to improve etch rate. Accordingly, etch processing time is shortened and productivity is

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